

OLDEST BEE PAPER
IN AMERICA

THE AMERICAN BEE JOURNAL

ESTABLISHED
IN 1861

DEVOTED EXCLUSIVELY TO PROGRESSIVE BEE CULTURE.

Vol. XVIII.

Chicago, Ill., June 21, 1882.

No. 25.



Published every Wednesday by

THOMAS C. NEWMAN,

EDITOR AND PROPRIETOR,

925 WEST MADISON ST., CHICAGO, ILL.

At \$2.00 a Year, in Advance.

WEEKLY—(52 numbers) \$2 a year, in advance.
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George Neighbour & Sons, London, England, are
our authorized agents for Europe.

Postage to Europe 50 cents extra.

Entered at Chicago post office as second class matter.

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A Clever Scheme.—Messrs. William-son & Bro., a very enterprising firm of Lexington, Ky., have ordered 500 copies of "Honey as Food and Medicine," with their business card in detail printed on the page following the title, in addition to a display card on the first page of cover. They are quite extensive dealers in honey, in addition to their supply business, and will find this the most practical, as well as the cheapest method of reaching both producers and consumers. In lots of 500 or 1,000 we can make a still further discount from dozen rates, and parties ordering can have their card printed in their local printing office if they desire. As we have the plates electrotyped, we can fill orders for large quantities very speedily.

The McGregor, Iowa, News says: "The publisher of the AMERICAN BEE JOURNAL may well be proud of its great success. The honey and bee business during the past year was not encouraging in some localities, but Thos. G. Newman is not a man to be dismayed by one bad year. The BEE JOURNAL will continue its weekly flights.

"Leaves from my Portfolio" is the title of a book of about 250 pages, by the Rev. W. K. Burr, M. A., of Belleville, Ontario, Canada, a copy of which we have received from the author who is an ardent apiculturist, and a constant reader of the BEE JOURNAL. It contains many literary gems, and is a valuable addition to our library.

We regret to hear that a large shipment of queen bees, on the way from the Island of Cyprus to Mr. D. A. Jones, of Beeton, Ontario, were caught among the icebergs in the Gulf of St. Lawrence, and all but two perished by its chilling power. This is a great loss, it being the first importation this season from Mr. Frank Benton, who has charge of Mr. Jones' apiary in Cyprus.

An immensity of white clover bloom is developing itself everywhere, and the linden trees are very full of buds. Propitious weather is all that is needed for a large honey harvest.

We have received a copy of the Cornell University Register for 1881-2. The next term commences Sept. 19. The department of agriculture is quite a feature of this Institution, and the advantages it offers are within the reach of every man who has made good use of the instruction afforded in the public schools. The fee for tuition is \$25 a term. It is located at Ithaca, N. Y.

Since the death of Mr. James Vick, of Rochester, N. Y., we learn that his large seed business is to be conducted by his four sons—the oldest of whom is named "James Vick." All of them have been educated in the business from boyhood. We hope they will worthily wear the mantle of their late father, and manage the vast business with the same excellent judgment which he displayed throughout all its departments.

Our new location, No. 925 West Madison St., is only a few doors from the new branch postoffice. We have a telephone and any one in the city wishing to talk to us through it will please call for No. 7087—that being our telephone number.

Who Gets the Profits?

The *California Apiculturist* for June has the following excellent article, and excepting one or two trifling inaccuracies, it is well worth consideration by every honey producer in that sun-gladdened State:

That there is a large profit made on honey by some one, is quite evident from facts that cannot be denied. That the bee-keeper does not make it is also evident, and only needs past experience to establish the fact.

We are reliably informed by residents in many of the eastern and western States, that when they purchase our honey there at retail they pay from 20 to 40 cents per pound for it. Dealers in San Francisco pay from 5 to 7 cents for it, and then deduct the weight of the cans at that, leaving the producer from 4 to 5 cents per pound, after deducting freight and all other expenses. Now, *who gets the profits?* There is a profit from 15 to 30 cents somewhere, and this is not all. The San Francisco dealers often sell and reserve the cans, or repack in small packages in order to secure a larger gain, and then sell the original packages back to the producer, after having robbed him of them. This imposition has been, and is undoubtedly practiced now. The apiculturists of Southern California have openly and publicly denounced this unfairness and have asked, through their associations throughout the honey districts of the State, that a reasonable tare be adopted on cases commonly used for 60 lb. cans, which would be from 12 lbs. to 14 lbs., but their requests have been disregarded, and a tare of 16 lbs. to 18 lbs. has been exacted, these tares including the cans.

These honey dealers doubtless have a ring and fix their own prices, as have the fruit packers and other dealers done. Nine-tenths of the honey producers in this part of the State are dissatisfied with the San Francisco market and are determined to ship around it to some other market. European dealers are making bids for our products, and many will try the experiment there this season. Shipments made to many of our eastern cities have been much more profitable than those made to San Francisco. No deduction for packages are made outside of San Francisco, as far as we have been able to learn. When the retailer sells our honey or other canned goods, he does not deduct the weight of the cans. Why this exaction from the honey producer? It is evidently a gross injustice that should not be tolerated.

Until a different system of marketing honey is adopted impositions of this kind will be practiced by the swindling rings that control the market. Why is it that the eastern bee-keepers get a remunerative price for their honey? The reason is plain, they place their honey upon the market in an attractive form—in small packages, neatly labeled. By the small package system they reach the

consumer in a more direct manner, thus avoiding the middlemen to a great extent. When we adopt the same system we will avoid swindlers and break up the rings.

The trifling inaccuracies to which we referred above, are the prices at which California honey usually retails here. For honey in sections they generally rule at about 20 to 30 cents, and extracted retails at about 15 to 20 cents; of course, this is strictly at retail, and not in job lots, which are much lower sometimes. But in the main, the sentiments of the article are correct.

In view of the complications likely to arise, and which had already arisen, the *BEE JOURNAL* long ago urged upon bee-keepers the necessity for adopting small kegs in making their shipments to distant markets, and the desirableness of 1 lb., 2½ lb., 5 lb., and 10 lb. tin pails, always neatly and tastefully labeled, and with the name of the producer prominently printed thereon, where intended for retailing to the consumer direct, not only as a practical method of advertising, but as a guarantee to the consumer of the genuineness of the article; and it is a gratification to allude to the happy results which have been obtained by following the course we suggested. Many progressive bee-keepers are realizing remunerative profits and rapid sales, where formerly their product was a drug on the market, and their returns anything but satisfactory. Where a good, neat package of honey has been sold once at a reasonable price, it is not a difficult matter to sell it again.

We have always deplored the employment of middle-men where it was possible to dispense with them. Their time is valuable—much more so, usually, than that of the bee-keeper or other producer—their expenses for clerk hire, storage, rent, etc., are large—a considerable capital is required for the successful prosecution of a commission or brokerage business, for advances to be made and goods lying idle, earning nothing—and all this must be paid by the producer eventually. The commission man, if honest, will look to the consignor's interest; if prudent, will look to his own, and all are prudent. His own percentages must be realized, though the shipper be bankrupted; claims of the consumer for tare must be rebated, though the producer knows his own scales to be correct, and coöperation claims must be al-

lowed, though the shipper was never so careful.

The producer should always be willing to allow an *honest* tare, for if a package be represented to contain a certain number of pounds, it should not fall short one ounce, rather, an ounce over; but he should carefully weigh the keg or pail before filling, and afterward firmly resist any extortion for tare when selling.

Avoid rings if possible. They are usually of no benefit to anybody but themselves, and are always organized to encompass some one, either producer or consumer. The interests of producers and consumers are to a great extent identical; those of the middle-men are antagonistic to one class, and sometimes both. We are not of opinion that they are dishonest or unfair in their transactions, but with them business is business, and the bulk of the net profit from produce of any kind, most usually remains in their own pockets.

Glucose in California.

The *Apiculturist* is evidently in earnest in assuming to forward the interests of bee-keepers in California, and every person in that State, who is dependent upon apiculture, should give that paper a generous support, and, if necessary, strain a point to sustain it. The following spirited article appeared in the June number:

It is beginning to be doubted whether the cans of "honey" put up by the fruit canneries of San Francisco contain the genuine article. The member of our company living near San Francisco has heard reports that men who have worked in some of these factories say that they do use glucose to mix with the honey they buy at a sacrifice from the produce dealers of San Francisco. A bee-keeper, in writing to our associate, says that he has seen any number of barrels of glucose in front of fruit canning establishments in San Francisco. The associate editor has seen 2 lb. unsealed covered cans of honey offered in stores in and about Oakland that sell for 30 cents apiece. On asking if they contained pure honey he was told that "it did not make much difference whether it was or not, so long as consumers could not tell the difference." It seems to us that these factories would not care to can pure honey, for, as is well known, they are for making large profits. If the above statements are true, it is time the practice was stopped. The managers of this journal are about seeking evidence on this score and will, if they are able to make out a case, have complaints sworn out against the violators of the law. It is time that the apiarists put their

honey on the market in their own small packages and reap the profits.

We hope the determination expressed to investigate the matter, and if glucose has been used in honey, to institute legal proceedings, will prove no idle boast, but that the law will be enforced to the fullest extent. Bee-keepers in California owe it to themselves to sustain the *Apiculturist* in its efforts to elevate the standard of their honey.

It has become a fixed maxim in the Eastern, Northern, and Central States, that pure honey will granulate to a greater or less extent, and with this as a test, it is becoming an easy matter to dispose of pure extracted honey at all seasons; but California honey has become more difficult of sale, because of its usual liquid state, and the claim put forth that it does not granulate. Its most extensive sale in our Eastern markets has been to unprincipled parties, who have bought it solely with a view to mixing with glucose syrup, and retailing as "strained" honey. With a pure article, put up in neat, popular packages, there will be no necessity for California apiarists to discount the prices of any other country in the world.



MISCELLANEOUS.

Bees in California.—Mr. J. E. Pleasants, in the *California Apiculturist*, gives the following item on the present prospect for honey in that State:

It were useless to deny that the frequent drouths which have been experienced in the last few years have a discouraging look for the business, but a man can scarcely be called wise who neglects to gain wisdom from his failures, and disasters are often of value in the way of experience, and many a lesson has the *pobre abejero* learnt from the drouths which, even in this much favored country, he is freely treated to.

In the last 7 years there have been two total failures in the business—1877 and 1879, and a partial one in 1880. As a natural consequence, many who were engaged in this pursuit got very much behind financially, and they were looked upon with pity for being so simple as to be engaged in such a precarious occupation, and the question was often asked of the poor bee-keeper by thoughtless ones, "Why don't you have an orange orchard, or a vine yard, such business' pay much

better all the time?" The prudent bee-keeper thinks of the wise proverb, "Speech is silver—silence is gold," and refrains. If he would, he could say: "There is no human undertaking that is certain. In this vale of tears every occupation has its lights and shadows, and our turn will eventually come." It has come. The future now looks very bright for the bee-keeper. He has had a long rest of more than a year, therefore he is more than ready to put on his visor, and buckle on his armor, and go into service with renewed strength and vigor, for his prospects are very encouraging. The yield of honey will be large judging from appearances up to date.

The editor of the *California Apiculturist* adds his testimony as follows:

The season, as we have heretofore stated would be late, in consequence of the late rains. In our locality, as in many others, the sages, wild alfalfa and other leading honey plants are now beginning to bloom, and the bees have commenced storing surplus honey. We are informed that in other localities bees have not commenced to swarm, which may be attributed to their weak condition, and that some apiarists are discouraged and are rendering their surplus comb into wax. In our own apiary our bees are storing honey well, considering the season, which we fear will fall short of our previous expectations....

It may be better than some expected it to be, but we will wait and see, at the same time advising those who have any to hold on to it, as the price is bound to go up. By the telegraphic dispatches we notice that "Old Nick," or something else, is playing havoc back in the East. The laugh won't be on their side this time, at any rate.

Mrs. Fairchild, of Pomona, under date of May 20, writes:

"The honey harvest in this section will not sustain the hopes that were entertained by bee-keepers a month or more ago. Like the prospective wheat crop, honey will be short. We will be satisfied this season with half a crop, and many others will not fare so well as that. In fact, we have as yet no assurance that we will have any to dispose of. Our hopes all hang on the quantity and quality of the white sage blossoms. Last year there was very little nectar in the flowers. With 600 healthy colonies of industrious workers yet to hear from, we must wait for further returns before we can form any definite conclusions regarding the coming crop. The oldest apiarist avoids answering the question: What will the harvest be?"

Mr. C. M. Drake, of Santa Paula, writes May 10, as follows:

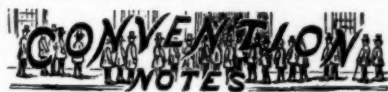
The honey prospects look dubious. I don't expect more than half a crop at utmost. Fog is coming up to-day for the first time in several weeks. If it continues it will help us out, but the ground is not wet down far enough. The hills are drying up, but the sages look fair as yet. I think

the bloom will not last long when it does open on them. Still, all is guess work till June. Then we can tell pretty well what the crop will be.

Use of the Honey Extractor.—The *Indiana Farmer* gives the following:

The full benefit of the honey extractor can only be appreciated in seasons like the indications predict the present one will be. When honey comes on slowly, bees are very loth to build comb, and will fill every empty cell in the hive before commencing the construction of new comb. At times the honey will come in very fast for a day or two, then again slack off, and in times like these, we can only get the benefits by having plenty of empty combs in which they can store the honey without stopping for its construction. We frequently secure twenty-five or thirty pounds from weak colonies or nuclei late in the season, by giving them plenty of empty combs which probably would not have made a pound of comb honey.

A rather curious circumstance happened in the country, not far from Somerville, one day this week. It was sunshiny and warm and a young lady sat in the parlor playing the piano, with all the windows thrown open, when a swarm of bees, attracted by the music, entered a window and settled on the piano.—*Somerville (Ala.) Falcon.*



Local Convention Directory.

1882. **Time and Place of Meeting.**
 July 25—Western Iowa, at Winterset, Iowa.
 Henry Wallace, Sec., Winterset, Iowa.
 Aug. 10—Maine State, at Harmony, Maine.
 Wm. Hoyt, Sec.
 Sept. 5—N. W. Ill. and S. W. Wis., at Rockton, Ill.
 Jonathan Stewart, Sec.
 Oct. 5—Kentucky Union, at Shelbyville, Ky.
 G. W. Demaree, Sec., Christiansburg, Ky.
 Tuscarawas Valley, at Newcomertown, O.
 J. A. Bucklew, Sec., Clark, O.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

The Western Iowa Bee-keepers' Association met at Winterset, Iowa, May 25, 1882.

Reports were received from the various bee-keepers, from which it was gathered that the loss since last autumn has been about 16 per cent.—nearly all from spring dwindling. The winter was one of the most favorable for bees; the spring the worst known for years, being cold and wet.

The main topic for discussion was "Methods of Increase." The universal opinion was in favor of artificial swarming and judicious dividing.

Samples of domestic preparations made from honey were duly sampled. Convention adjourned to meet in Winterset, July 25, 1882.

HENRY WALLACE, Sec.



For the American Bee Journal.

The Non-Progressive Bee-Keeper.

MRS. A. M. SANDERS.

I suppose all these progressive folks
With their patent hives and lotions,
Call me a stiff old foky.
"Cause I don't adopt their notions;
I've kept bees nigh on forty years,
And yet these Yankee nobbies
Think they can teach me something new,
With their new-fangled nobbies.

They say they've got some kind of thing—
I guess they call extractor—
That sings the honey from the combs;
And, then, it is a fact, sir,
They'll drain the honey from the cells
Then let the bees refill it,
And almost every day or two
They'll go and rob and steal it.

I give my bees the first best chance
To make their own free living,
Then take whatever they have left,
And thank them for the giving;
And then they've got a patent stove
That, when they choose to make it,
Will pour a mess of stifling smoke
Into the bees—"plague take it."

I have been told they melt up wax,
And call it comb foundation;
And quilts, and clamps, and other sorts
Of fools' conglomeration.
They've got to swindle honest folks,
And get their hard-earned money
With striped bees and hives that hold
Two hundred pounds of honey.

When you have lived as many years
As I, I think you'll see
That patent hives are not the things
That they're cracked-up to be;
Those monstrous yields of honey
From one hive they receive—
Well, I want to see it 'fore
I say that I believe.

I stick to my old hemlock gums,
Without chaff or any fixtures;
And I don't have to feed my bees
With flour and glucose mixtures.
But I suppose the world will move
On in the same old way
For swindlers they will advertise
And make their business pay.

Sheridan, Mich.

Bienenzeitung (German).

My Opinion of Cyprian Bees.

JOHANN STAHALA.

Although requested by several parties to publish my opinion of Cyprian bees in the columns of the *Bienenzeitung*, I did not like to do so, until I had well tried this race of bees in my apiary. But now I feel myself in duty bound to make my opinion public. Count Kolowrat, to whose kindness I am indebted for having my entire apiary alive with genuine Cyprian bees in their most perfect purity and beauty, wrote to me in the spring of 1877 as follows:

"To you, right reverend sir, having grown in our love and esteem as the author of many sterling articles on apiculture, I recommend my golden child, with the ardent desire that you will judge of it without prejudice, and that when the time comes you will inform me of your experience with it, be it good, or the opposite from it."

If any bee-keeper who possesses scarcely one genuine or hybrid colony of Cyprians, may permit himself to judge thereby of the entire Cyprian race, then I think it will be admissa-

ble for me to do so, as I have had, during the last two years, a great many Cyprian colonies in my apiary. For in the previous year I had 71 Cyprian-hybrid colonies, with one genuine, and in the present year I had in the summer 87 strong Cyprian colonies in my bee-garden, and after removing the hybrid colonies, I have ready for wintering 73 colonies of pure Cyprians; and as several bee-keepers in my neighborhood brought last summer a number of small colonies into my bee-yard, to have Cyprian queen cells placed in them, and the young queens fertilized by my Cyprian drones, the number of Cyprian queens that were altogether reared this year in my bee-garden reached up to 108. From this it may be seen that opportunities enough were offered me to test the qualities of the Cyprian-hybrid bees, as well as those of the pure Cyprians. As certain as I was last year, that all of the colonies in my garden, with the exception of one, were Cyprian-hybrids, just as certain am I now, that my Cyprian queens of this year, with very few exceptions, have been fertilized purely Cyprian.

Count Kolowrat, when even the purity of his Cyprian bees was questioned and the assertion was made, that his apiary, too, was filled throughout with hybrids, sent last summer for a fresh colony of Cyprians, and, through the kindness of that gentleman, was it made possible for me to rear my queens of this year from the brood of the recently-arrived original queen, and, as my apiary stands quite isolated, for, in the town I live, and in the surrounding villages no bees are kept, my queens of the present year, with few exceptions, were purely fertilized.

Following this introduction, I will now describe the bees themselves. The Cyprian bees are similar to the Italians, but have many distinctive marks, by which they plainly differ from the Italian bees, and those are:

1. The true characteristic or essential mark of distinction, by which, according to my experience, a pure Cyprian colony can be distinguished from an Italian is this, that all pure Cyprians, without any exceptions, are more or less yellow on the lower part of their hind bodies, changing into black at the point of the body, while the Italians—even the handsomest—are entirely black upon the lower part of their body. Some of the pure Cyprian colonies have such beautiful yellow workers, that only the extreme point of the body appears black, and the yellow part underneath their bodies looks as glossy as if covered with a coat of varnish, and for this reason one can recognize them immediately as Cyprians, when noticing any of them crawling over the glass near the entrance, even when several paces away from them. But if bees are found among a colony that are coal black upon the lower part of the body, then it is a Cyprian-hybrid colony, even when the remainder of the workers have the marks of the Cyprians, and are perhaps more beautiful yet, than the workers of a pure Cyprian colony. For a few of my

hybrid queens from last year had such beautiful workers, that a layman would have pronounced them as genuine; but they could not be genuine, for neither myself nor anybody else in my neighborhood owned any Cyprian drones. Last year, a larger or smaller part of my workers in all the hives were black; this year I cannot find a single black bee among my Cyprians.

2. Pure Cyprian workers are somewhat smaller, slender, like a wasp, their bodies ending in a sharp point.

3. The hair-growth of the genuine Cyprian bee, especially upon the breast, is a light yellow, and of a lighter shade than that of the Italian.

4. The first 2 rings of the hind body are orange-colored, and these rings are yellow the entire width, while among the Italians, many workers are found that have only two narrow yellow stripes, and sometimes only one.

5. The last white rings of the hind part of the Cyprian workers are broader than those of the Italian, because the small, white hairs forming these rings are longer.

6. The Cyprian bees have between the wings, in the center of the little backplate, a yellow spot, which I have never found to be of such a light yellow on the Italians; but the color of this spot is not of the same shade on all the bees, on some it is a little darker.

7. The genuine Cyprian bees seal the combs, especially those of an older date, strikingly ash-grey, while the Italians seal brown.

8. The increase of the Cyprian workers, the pure as well as the hybrids, is multitudinous in the spring. I have never noticed such an increase, neither among the domestic nor among the Italian bees, which latter are by all means superior to the domestic in increasing. All that visited my apiary expressed their surprise over the gigantic colonies which I was able to show to them last spring. I, for this reason, was compelled to divide many colonies, and had to form nuclei, and from those undivided I had to take several sealed brood combs, so as to create space. But I furnished to my bees neither flour, nor milk, nor eggs, as artificial food. Among my Cyprian colonies I noticed not as much inclination to swarm as is the case with Carniolan bees. Only 3 natural swarms did I receive this summer, while other bee-keepers in this locality had a great many natural swarms. It is possible and even probable that, if I had not divided the strongest colonies, and had not taken away from the others so many brood combs, I would have had more natural swarms.

The natural consequence of this extraordinary strong increase of the workers in the spring, is, that the Cyprian bees gather more honey in the summer than any other bee I know of; for where there are many workers, much can be accomplished.

This superiority of the Cyprian workers, so highly important to the practice, did not escape the keen sense of observation of Count Kolo-

wrat, for this noble-minded gentleman, who is a skilled master in judging of the different bee races, told me that, according to his best knowledge and conscience, the Cyprian bees possessed the greatest ability of performance. When I visited Count Kolowrat last summer, and he questioned me how the pure Cyprian colony which he had sent me was doing, I answered: "That colony is so strong that I had to take from it when I left home 3 combs of brood, fearing that they would swarm during my absence; but I have never found any honey in this hive." Then the Count said to me: "When you have returned home you will find the hive full of honey." And so it was. Returning home after an absence of 5 weeks, I found that the entire hive was filled with combs of honey. It was the same this summer, all hives, the colonies of which I had not divided, abounded with honey, and I therefore had to bring the extractor into motion, although the present year is not looked upon by bee-keepers as a favorable one.

10. Here I will remark, that the collecting propensity which manifests itself with the Italian bees, through a greater liking to rob than is the case with our domestic bee, is developed in a yet greater degree among Cyprians. Therefore, it is well to pay more attention to the Cyprian bees, after the honey gathering is over, than to the Italians, so that their natural collecting propensity may not degenerate into a robbing propensity. Last fall, one afternoon when absent from home, I was robbed of a whole colony.

11. If the genuine Cyprian bees remain strong in the fall, too, then one has greater hopes of bringing them safely through the winter than would be the case with the Italians; for it is well known, that the Italian bees, after the expulsion of the drones, grow weaker from year to year, and never go as strong into wintering as the Cyprian bees. As I had cased those colonies this fall that had Cyprian-hybrid queens, I did not know finally, into what colonies I should put the bees from the cased colonies, for as all the colonies were very strong, I did not like to overfill them.

12. The Cyprian drones are, with only few exceptions, of a beautiful yellow color on the top of the hind body, as also on both sides of the same; and I have never noticed this in like manner among the Italian drones, which is, furthermore, confirmed by the masters of bee-keeping, for they say that the pure Italian drones are entirely dark, with only a very indistinct, yellow-looking stripe upon their hind body. I found in my apiary this summer a few drones who were marked yellow nearly all over; they could really be called apistic beauties, while the first drones in the spring were of a dark color.

13. I found it in truth confirmed, what Count Kolowrat had stated to me as his experience, that the Cyprian queens begin much later with laying drone eggs than the Italian or domestic queens. I therefore wrote

to the Count on the 24th of last May, that I could see a few drones only in three hives in my apiary, notwithstanding the fact that the colonies were quite strong already, and, as I desired to give to all of my colonies pure Cyprian queens, I felt quite a longing for Cyprian drones. For this reason I employed, when I found that the queens showed little inclination towards laying drone eggs, all the means at my command to increase the number of Cyprian drones, so that I could count with greater certainty upon a pure Cyprian fertilization of the young queens, and my desire was fulfilled. In July thousands and thousands of beautiful drones came flying into my garden. The young queens did not have to look long before finding a Cyprian drone. In this manner I had 55 young Cyprian queens, daughters of the original queen from the Island of Cyprus, fertilized between July 22 and 24, in about 3 days.

Here let me remark, that my experience in reference to the fertilization of the daughters of the original queens, does not agree in full with the experiences of Count Kolowrat, for, while the daughters of the original queen in his apiary furnished, every one of them, a throughout yellow posterity of workers, notwithstanding the fact, as stated by him, that some of those queens had come in certain contact with black drones, I have found that 3 daughters of the original queen from the Island of Cyprus brought forth many black (nearly coal-black) workers, and proved themselves, therefore, Cyprian-hybrids, while all the other daughters of the original Cyprian queen had such beautiful workers for her children, that the heart of a passionate apiculturist must have filled with joy when looking at these golden darlings.

If the Italian bees have bribed the eyes of many a bee-keeper, on account of their handsome dress, so that he could find no rest until he saw himself in possession of the Italians, and saw them fly around in his garden, then the Cyprian bee—the genuine—must indeed charm the eye of any apiculturist who has never beheld them in their uniform splendor; the more so, because they possess, besides their more beautiful dress, many valuable qualities which the Italians lack. It is not surprising, therefore, that many a bee-keeper after having seen these beautiful and industrious little insects, cannot withstand the desire of coming into possession of them.

14. The Cyprian queens are smaller than the Italians, and have a very long and pointed hind body. In reference to their color, they vary the same as the Italians. Among them I find some that are dark, some are yellow, and some brilliantly yellow. After issuing from their cells, they are mostly similar to the Cyprian workers. The first two segments of the hind body are of an orange-yellow too.

But the upper part of the hind-body, commencing with these orange-colored rings, changes into black towards the pointed end of their

bodies; the sides of the hind-body are in most cases light yellow, more beautiful than those of the Italian or those of the Cyprian workers, and the lower part of the hind part is a pale yellow. I had a queen this year upon which nothing black at all could be detected, only upon the point of the body could be noticed an almost imperceptible darker shade of yellow. All to whom I showed this queen assured me of having never before seen such a beautiful queen. Unfortunately, and through my own fault, I have subsequently lost this queen.

The offspring, though, do not always take after the queen; for many a darker queen has yellower workers than another, which is of a beautiful yellow, and has been purely fertilized. The lighter or darker color of the workers takes its origin from the Cyprian drones with which the queen has come in direct connection while being fertilized; for, the first Cyprian drones this spring were darker, and though the Cyprian queens that were fertilized, at that time were fertilized pure, yet the workers (their daughters) were much darker than the workers of those queens that were fertilized later, when I already had many, very beautiful yellow drones in my apiary.

The light color of the Cyprian queens changes likewise into dark or dark-red when they are getting old, as is the case with the Italians. The pure Cyprian queen which I in the previous year received from Count Kolowrat was of a reddish-yellow; this summer she had already changed into dark-red.

15. Finally, I will mention another distinction of the Cyprian bee, namely, the famous sting-fury of the Cyprian bees, about which we have read a description in the *Bienenzeitung*, on account of which it was attempted to deny to them their fitness for a large apiary. I have practiced a great deal with these bees in my large apiary during these two years, and have had, therefore, many opportunities to obtain experience in this regard. Last year, as well as in the present, I have for the second time given new Cyprian queens to all the colonies of my large apiary. I furthermore had to take all the combs from the hives last spring, because I desired to exchange the old-fashioned sticks for frames, brush off the bees from them, insert the combs into the new frames, and get the cabinet-maker to nail down the ledges in the hives, after which I let the bees that had been brushed off from the combs run back into their hives; besides all this, I had to form several nuclei—had to look quite frequently if the queens were fertilized, and in the fall, if the bees possessed sufficient food and proper combs for the winter. As may be judged by the above, I have had in this connection a great deal of experience. But, it will be said, what was your experience in reference to the stinging propensities of these bees? Tell the truth! Have you not been killed by these beasts that take so much delight in stinging? And I answer: No, I am alive yet, and they give me great joy!

Never have I owned such industrious, strong and beautiful bees. It is true, I occasionally was made cognizant of the fact that the Cyprian bees do not belong to a stingless species, and that they possess great expertness in the application of formic acid plasters, but during these two years I have frequently busied myself during a whole afternoon in my apiary, in company with my assistants, without receiving a single sting. I have during that time acquainted myself fully and in detail with the manner of treating the Cyprian bees, having had opportunities sufficiently to learn all about their natural proclivities, temper, etc., and I now know how I have to manipulate the former colonists of the Island of Cyprus.

If you are acquainted with the temper of a human being, with whom you stand in close relationship, then you very soon will know how to act towards him, so as to retain the friendly relation. According to my experience, the Cyprian bees possess a choleric temper. They are, consequently, very irritable and easy become violently angry, and, therefore, they require a treatment which must be compatible with their temper.

But psychology teaches us that man, when in the possession of a choleric temper, will easily fly into a violent passion, when deeply insulted, and if you continue to provoke him while he is in this violent state, he will grow still more violent; on the other hand, though, if you yield to him, or you clear his path, he will be, after a while when his anger has cooled down, one of the best of men. The same it is with the Cyprian bees. For animals, too, have various tempers.

If you carefully avoid everything which would also irritate bees of another race, viz: all sudden opening of doors, all opening of the hives when the wind is blowing, or rain is coming down, all noise near an open hive, every violent shaking of the combs, every hasty manipulation in the hive itself, then they will allow themselves to be handled the same as the Italians. But if you irritate them, or offend them seriously though whatever it may be, they will easily grow very wrathful, particularly when a strong colony has not been opened for a long time and they are not accustomed to the opening any more, they will turn their eyes upon the bee-keeper with a very hard look in them. If you leave such an excited colony to themselves for a while, so as to give time to their anger to cool, you can continue to work near them after a lapse of about two hours with perfect safety. This precautionary measure I have closely followed.

But many bee-keepers increase this proclivity to sting among their bees, because when they see them angry they try to subdue them by force, using smoke or water to accomplish this, instead of yielding to them or giving them time in which to recover from their rage.

I endeavor to avoid everything which might seriously offend the bees. But when it did happen that I had offended through carelessness some

strong colony, and I noticed that they intended to make war upon me and had even then already pressed into my hand or face a pointed ultimatum, then I did not attempt again to gain the upper hand by the use of smoke or water; I played the role of the prudent, i. e., I yielded, closed the hive and departed, paying, in the meanwhile, a visit to some other colony; when after an absence of about two hours, I returned in humility to the hive containing the warlike colony, and began to work quietly and cautiously, we were again the best of friends. If this had not been my own personal experience, I would be slow to believe that a colony which had been full of rage in the forenoon, could be as meek as a lamb in the afternoon. Here the French proverb is well applied: *Tout par douceur et rien par force.*

Further, I must remark that I have done my apistic work during daytime mostly at such hours when the older bees (being more inclined to sting) were out upon the pasture, so as not to irritate them unnecessarily, for then I had nothing to fear from the young ones; near very strong colonies I worked during the late hours of the afternoon, the old bees were then at home it is true, but they were tired out from their day's labor, and were not so quarrelsome.

But, although the Cyprian bees are somewhat more quarrelsome than the Italians, I nevertheless prefer the Cyprians, when comparing the qualities of both races with each other. And even if the Cyprian bees did not offer anything preferable to the Italians, I like them better than any other bee for the only reason, that they very soon grow strong in the spring and remain strong in the fall, for, as everyone knows, strong colonies are profitable.

Even if the principal motive of most people in keeping bees is to derive profit from it, the beauty of the bees is nevertheless highly valued by such people, and the beautiful and at the same time more profitable bees are better esteemed by them, than those that are black (*Omne tulit punctum qui miscuit utile dulci*). This is my opinion of Cyprian bees.

In expressing my opinion in only a few words, it is as follows:

Count Kolowrat—whom nobody can charge with mercantile speculations—spoke the truth when he told me last year that he considered the Cyprian bee, according to his best knowledge and conscientiousness, as possessing the greatest performing ability. I fully agree with his statement, for, as I have just as large an apiary—although not such a handsome one—as Count Kolowrat, I was enabled to convince myself of the truth of his statement. Therefore, my opinion agrees entirely with the opinion of this esteemed gentleman.

In conclusion I will yet say: Count Kolowrat deserves the thanks of all apiculturists who have Cyprian bees in their apiaries, or who intend to procure them, on account of his introducing the Cyprian bees into our country!

I, for myself, as well as in the name of all such bee-keepers, herewith express to him this gratitude for his great sacrifices, for his disinterestedness and his kind efforts to render service to others.

For the American Bee Journal.

Care of Comb Honey—No. 3.

G. M. DOOLITTLE.

Having the honey all glassed and graded as I told you I did in my last, the next thing we wish is crates or cases for I believe the putting of honey upon any market in bulk is a bad practice, and for shipping honey to a distant market crates are a necessity. A difference of two cents per pound is generally made between honey in bulk and honey nicely crated, while the crates and crating should not cost one-half of that amount. I get out my crate stuff in the winter all ready to nail together, so as to be as near ready as possible for all things connected with the honey harvest. If I purchased my crates of a supply dealer I should do so in the winter, so as to have all in readiness, for it is much better to have a few crates left over than to be obliged to wait, and perhaps lose a good chance of selling our honey because our order is sent at the last moment, when some unexpected delay is almost sure to happen.

For the 2-lb. or prize box there is nothing better than the prize crate, which holds 12 boxes or sections; but for the 1½-lb. box I prefer a crate holding only 9. The demand for small sections seems to be in small quantities, for these small crates are frequently bought by one person, and thus the retailer never opens them, but sells by the crate instead of by the section. Having concluded how many sections I wish in a crate, I pack them together the way I wish them to stand in the crate, and then measure them, which gives me the exact size I want the crate, inside measure, and no guess work about it. Much of the annoyance to supply dealers would be saved if all would adopt this plan. In the making of crates there is one item I wish to speak of. In handling and shipping comb honey, it will always leak more or less from the many accidents it is exposed to, and if the crate allows this leakage to run out at the bottom down on the next crate, the floor, etc., it tends to lower the price of our production. To prevent this, some of our apiarists have the bottom of their crates halved into the ends and nailed both ways, to secure as nearly as possible a tight joint, but for all this the joints get wrenched apart more or less in shipping and leaky crates are the result. To obviate this leakage of crates, I adopted the following plan last fall, which proved entirely satisfactory:

Take good strong manilla paper and cut it two inches larger each way than the bottom of your crate is, inside measure. Now get out an inch board large enough so it will just go

inside of your crate easily, and place it upon the paper so that the paper will project equally on all sides, when the sides are to be turned up all around and the corner pressed over nicely, making a joint like that on a baking tin. Lift out your board and set your paper dish in the bottom of your crate, and you have something which will hold all running honey till it is full. We all know that if any honey leaks from the combs that the sections will be more or less daubed upon the bottom of them, and in taking from the crate they are ready to soil everything the touch. To avoid this I saw the ends of the crates 3-16 longer than the piled up sections are high, so as to give room to lay 3-16 inch strips across the bottom of the crate for the sections to rest upon. These strips I get out $\frac{3}{4}$ of an inch wide, and so arrange them that the edges of the sections come on these strips, thus leaving a 3-16 space under nearly the entire section. Thus it will be seen that all the leakage is kept inside the crate, and that the sections are kept all clean besides.

We are now ready to crate the honey by placing the sections in the crates, putting the best side of each grade on the outside; but do not put any of a lower grade in the same crate. After a crop of any kind is graded, it is always customary to put the best, or face side of said grade out. Having previously weighed the crate, and the weight of it being marked on the same as tare, I now fill it as above and nail on the cover with wire nails, which will drive without jarring enough to crack the combs. I space these nails at equal distances, using three at each end. Over the heads of these nails I drive brass-headed furniture nails, which cover up the heads of the other nails, and give the crate a neat, tasty, finished appearance. Also, when the crates are filled up those on top rest on these brass-headed nails, and thus the tops of our crates are not all marred and bruised up.

Now with a wood-rasp and sand-paper, the corners and all rough places are smoothed off, when the crates and contents are weighed and set down as gross weight above the tare. Draw a line and subtract the tare, setting down the net weight, when the crate is ready for hauling to market. In crating the honey I always place it in the crate the same side up it stood while on the hive, as, from experience I am led to believe it can be transported more safely that way than bottom-side up. In hauling to market, as far as possible I have the combs run crosswise of the wagon, as the motion from side to side of the wagon, is greater than endwise. Get a good platform spring-wagon and load it, so the springs carry the load easy and there is little danger of breaking the combs. In loading honey great care should be taken to set it down without jarring, and always lift the crate to move it, instead of sliding it. I have frequently seen men slide a crate of honey along on the bottom of a wagon or car till the bottom struck the head of a bolt or some uneven surface, when every comb in

the crate would be broken by the wrenching the crate received by such careless handling. If our honey is to go by rail it should be placed in the car with the combs running lengthwise of the car, as the coupling of the cars is about all the danger there is of breaking the honey when shipped by rail. By placing the crates a foot or two from the front end of the car, and having the combs run as above, there is but little danger of breakage if the Railway employees will handle it carefully.

This ends the CARE part of these articles.

Borodino, N. Y.

For the American Bee Journal.

The Wintering Problem.

JAMES HEDDON.

Need I offer any apology for presenting this theme again. I believe I need not, when it remains a fact that it is still not understood. In this article I wish to take a retrospective survey of the ground I have come over, in an earnest and honest effort to unravel this problem.

First. It may be in place to hastily survey some of my critics. To me they seem to be divided into about two classes. Among one class are those who feast upon mirth, imagination and ridicule. A sort of "Jack Horner," who stick in their thumb and pull out a plum. Oh! what a brave boy am I." A class who think they see some one going down hill, and so they kick at his sled. Then the other class, whose earnest enthusiasm for the important truths is their only inspiring motive toward controversy.

On page 70 and 72 of this year's *Gleanings*, these two classes are faithfully represented in our "cold hard fact," "box-elder" novelist, and the well known extensive observer and honey producer, George Grimm.

After thanking Mr. Grimm for his splendid compliment, one that from its source settles deeply into my feelings, I feel it a duty, and an act that may be productive of good, to argue with him upon the few points of difference between us. I hope that his fair, earnest and scientific spirit may act as a contagion between us. But first I want to hastily review the ground I have come over in trying to get nearer to the solution of this far-off problem. All who had reasoned publicly upon the subject, had, as is usual, reasoned from the center to the circumference. As all had failed to find what to me seemed reasonable causes for the effects that had come under my observation, I resolved to try the method of reasoning the other way, from the outside toward the center. This plan often very easily solves problems that the other method leaves only in deeper obscurity. Let me illustrate: Years ago I saw a gentleman hand another a three-jointed foot-rule, and ask him if he could open it just three times and no more and open all, and from him every time. I saw him puzzle over it

many minutes, when he handed it to me. Though I had never thought of the puzzle before, the thought struck me, that the converse of the proposition must also be true, viz, that the rule would shut three times toward me. I thought I would try that first, and see how matters look through the other end of the telescope. You know the result: Simplicity simplified.

Once more. After astronomers had searched the solar system for more planets, and with their best glasses could find no more, Mr. Leverrier, the celebrated French astronomer, said "there is another planet beyond the orbit of Uranus." Now, instead of saying I will look for it, he said I will look for its effects upon Uranus, and by so doing he theorized a chain of facts in regard to its size, period of revolution, etc. Though having seen nothing, he felt that he knew right where the body of matter would be at a certain day and hour; so he wrote to Dr. Galle, of Berlin, to look for it with his better instrument at that particular time, and in a certain locality, which he did, and which resulted in the immediate discovery of the now well known planet of Neptune.

Whether right or wrong in my deductions leading to my lately written opinions upon the subject of bee cholera, dysentery, or diarrhea, or whatever name you may choose to call these effects, I reasoned in this way:

1st. Evolution is now denied only by the ignorant, egotistic or prejudiced. The third law of evolution is, substantially, "Nature is at war with itself," each organism is warring for the ascendancy over some other; one being can live because another dies. One is the nutrition for the other, from man back to the lowest form of a bacterium. All three of the kingdoms feed upon each other.

Many higher forms of animal life live only upon high forms of animal life, including man, as either the consumed or consumer. Many higher forms live on a mixed diet of both animal and vegetable. It is not only true that higher forms devour lower forms of life, but the converse of the proposition is also true. Very low forms of both animal and vegetable life feed upon the highest type of animal life, man, as well as upon lower forms. In the face of these demonstrated facts, is it unreasonable to look somewhat in this direction for the cause of bee dysentery, when we know that an attack of these germs produce similar symptoms in other animals? But we realize that there is a peculiar condition with bees during winter. We know that to void in the hive is dangerous; we therefore believe that bees can survive in this climate, where they are for a considerable time closely confined to the hive, only because of this peculiarity, which is, that they as a rule eat a food that after the nutritive and heat-making elements are extracted, the residue can be passed off by sensible and insensible transpiration. May it not be that the excep-

tions to this rule cause dysentery? Throughout all nature, health is the rule, and sickness the variation from that rule, so to speak. The inherent tendency is to live. The outward tendency that you die so others can live. From this line of reasoning my first statement was "dysentery, produced by an over amount of animal or vegetable matter in the food."

At that time I supposed that bacterium was an animal germ, but now I believe it, from good authority to be vegetable, but it is one of those active forms, as mold, etc., that possesses the calamitous capability of reproducing itself in vast hordes, in a space of time proportional to its size. As I use the words "vegetable matter," I mean solid, such as bee-bread, or floating pollen in the honey. Of course, I am aware that honey itself belongs to the vegetable kingdom. From my first thoughts and proposition upon the subject, I have not as yet seen any cause, either from observation or the reasoning of my contemporaries, to change my mind. Through the grounds of the original proposition I have been forced to vacillate from one idea to another according as new evidences and deductions were brought up. Such oscillations should be approved, and not censured, for they are the necessary results of honest investigation, and the leaders to the solution of the problem. But, then, we have among us men that, though not celebrated for their experience or logic, are wordy and vigorous, and this energy must be exercised, and it finds its outlet in making up faces and caricaturing the supposed unpopular.

But Mr. Grimm says that "disease in the human race does not in all cases necessarily originate from the same source." True; but some diseases do (scarlet fever), and these that do are distinguished from those that do not, by their specific symptoms. No disease heired by human flesh has more specific symptoms than bee dysentery. Mr. G. thinks that the following conditions may either by themselves, or variously coupled together, all have more or less effect to produce dysentery, if I understand him correctly: Eating too much pure bee-bread, fermented honey, fermented bee-bread, long confinement, with variable temperature, impure air, and dampness. Others add to the list many other conditions, among which are cold, cider, and Langstroth hives, and some even credit it to human laziness.

Now that most of the conditions mentioned above may act as aggravations upon the cause, I do not deny, and if bacteria is the cause, I am free to admit, that dampness and warmth at some time, and in some place, caused the bacteria to germinate. But I have never been convinced that cider would produce dysentery. Added to my own experience is that of Mr. Grimm, and all point to the fact that cider is not a cause direct, if at all. I have to-day more belief in the pollen theory than the bacteria hypothesis.

I will hastily run over a few facts

for the reader to draw his own deductions from. Cider—I have had my bees winter nicely with much cider in the combs.

Pure air and dampness—I saw Mr. Balch's bees come from a close unventilated room, dripping with water, and combs all moldy, in excellent condition. I have seen the same on other occasions. I had bees winter well under ground, in a hole like a grave, when the combs were nearly ruined with moldy rot. I saw about 40 colonies come from a little unventilated clasp, made so small that they filled it almost solid, in the best condition I ever saw bees enjoy in April. I saw about the same number come from the same clasp, one year later, all dead with dysentery—every bee.

Cold and long confinement—I have seen, and have many credible reports of splendid successes in out-door wintering where severe cold and long confinement were present. In the northern part of this State, where their losses are hardly as great as in southern Indiana, such a state of affairs is to be expected.

Varying cold and long confinement—I am not so sure about. I do not now recall a case of the kind here, for in varying winters the variation is usually great enough to prevent long confinement. That is the class of winters that I should most dread, because early breeding would likely result, and then the handling and consumption of pollen in confinement, and consequent dysentery follow.

Fermented honey—How can I look on this as a cause, when I have never known it to exist in any apiary only as an effect. I have found that the honey soon gets thin, after the warmth of living bees is exchanged for the damp carcasses of dead ones. In this climate, out-doors rivals our poorest cellars, for a damp atmosphere; in fact, it far exceeds them. Yet in a cellar of the driest nature, I have had my colonies die like rot, and leave plenty of thick, rich basswood and other honey, with combs dry, but badly daubed. I never saw a moldy comb in that cellar.

I ask you to believe me that I, as well as many others, have seen all the possible causes referred to by Mr. Grimm present in a radical form, and many in various combinations where no dysentery resulted. I have also seen it in its worst form, where not one of these causes existed that I could discern, except healthy appearing bee-bread, and nearly always brood. Now, all that has to be done to shut this theory out in the cold with the rest, is to show us a case of dysentery where the bees have no bee-bread in the combs, nor floating pollen in the other stores, as in case of pure, properly made granulated sugar-syrup. It will not do to point to a case of survival, where the combs contained pollen. We all know that all winds do not blow away houses, but we further know that they bounce up into the air from no other cause. If colonies thus prepared with pure stores free from pollen in all shapes do have the disease under any other

circumstances, I shall be forced to admit that the main cause is something else, and, at best, pollen only an adjunct or aggravation, if any damage at all. I would say to the "Jack Horners," do not rake up any old half-forgotten cases, where sugar was fed with honey, or on top of it, or in combs that contained pollen; hold your explosive desire to beat somebody, till some man like Prof. Cook, who has the close practical ability to make a comprehensive test, and the acknowledged integrity to make his decisions satisfactory to us all, will put the matter to a test that shall wind up all further discussion. Dowagiac, Mich.

For the American Bee Journal.

Reply to Mr. P. L. Viallon.

PROF. A. J. COOK.

Mr. Paul L. Viallon, Dear Sir:—I take pleasure in replying to your courteous letter; the more so as you are one whose tact, energy and superior skill, coupled with sterling honesty, has done very much to brace the "dollar queen business" into its present proportions.

I cannot see how that any observing bee-keeper of experience can hold that the laws which govern in the breeding of the higher animals do not prevail in the breeding of bees. Surely bees vary. Surely they transmit their peculiarities. Then certainly, here as elsewhere, selection guided by close study and observation is all important. Mr. Viallon recognizes these facts practically, and hence his well-earned reputation. I wish prices would sustain him in exercising even far greater care. I do think that we are enabled by care to select our drones to a large degree now. In our apiary only two or three colonies now have drones. I believe that if there was pecuniary inducement, that such wise and painstaking breeders as Mr. Viallon, could even now select his drones. It would require great skill, much pains and no small labor, but it could, I think, be done. I will not tell how, as no one could afford to practice if I did. If I am mistaken, a method would be forthcoming if the prospective gain therefrom would warrant the labor and study requisite. Alas! under the present system it will not.

True, breeders of cattle, etc., do have to weed out. Breeders of bees will have to do the same to reach perfection. You know, Mr. V., that a queen—no queen—will always reproduce all of her good qualities. I would have you know, also, how to breed from the best drones only, and select as carefully in your males as in your queens.

To sum up then: 1st. I have not the least doubt but that the laws that govern in breeding are uniform in all animals. 2d. It is as important to select our drones as to select our queens. I believe it is possible to do this now, with great labor, and if not, that man can invent a way if the inducement is offered. 3d. Selection and weeding

out must be carried to the same extent as in other animals.

To conclude, my friend, I have never had a doubt that you lacked one whit in earnestness, honesty or good purposes. I believe that you are doing much to make the system you uphold with your practice less damaging; but I cannot believe that an art like that of queen-rearing, that demands the highest and best ability, can ever reach the high ideal so desirable, unless stimulated by at least a respectable compensation. If it can, it forms an exception among the vocations of the world.

Lansing, Mich., June 7, 1882.

For the American Bee Journal.

A Visit to the Texas Convention.

W. K. MARSHALL.

The Texas Bee-Keepers' Convention met at McKinney, Texas, April 25, 1882. The Convention was well attended, considering that Texas has but recently begun to make any advance in bee-culture. We met in the grove in which Judge Andrews' apiary is situated. The Judge has some 300 colonies of bees, all brightly-colored Italians. He uses the American hive, and for a number of years has been breeding the light-colored Italians. He is an amateur bee man, and more than any man I have ever seen keeps bees for the fun of the thing. He has some of the most beautiful queens I have ever seen.

Texas has a diversity of sale and production, and, of course, has some localities better than others for the culture of the bee. Eastern Texas, along streams, affords good bee pasture. In Northern and Western Texas the prairie lands, especially along the streams, bees have done well. In these localities the ratan vine and the horse-mint are the great honey producing plants. In Eastern Texas we have the ratan vine, linden, sumacs, chinkapin, and, in the fall, the golden-rod and cotton.

Though this was but the third meeting of the State Association, we had representatives from quite a number of counties.

The Convention owes its origin and success largely to the efforts and influence of Judge Andrews. The hospitality of the Judge, and that of his estimable family, made the members of the Convention feel quite at home, and they spent a most enjoyable time in his beautiful grove, among his 300 colonies, just in the height of the swarming season. A number of important manipulations were conducted in the presence of the Convention.

The Convention discussed a number of important subjects, such as "Should we breed for color?" "Does the impregnation of the queen affect her drone progeny?" "What is the best hive for this climate?" "How to secure the largest amount of honey, and where, and how to market it?" It was agreed on all hands, that several of the subjects that interest the Northern bee-keepers so much are of

no interest to us here, such as how to winter, and the causes and cure of dysentery. There is no trouble in wintering in this climate, and dysentery is almost entirely unknown.

The outlook for our industry is quite inviting. In 1865 I imported my first Italian queen—probably the first ever imported to this State. Now they are scattered all over the State, and intelligent bee-keepers are spread through all sections of the State. Quite a market for honey has sprung up in our large towns.

At our Convention there was a manifest disposition to spare no pains nor expense in securing the best strain of bees. The Cyprians, Syrians and albinos are all being tested this year. The population is crowding into our vast territory, and next year we will, in all probability, be able to report vast progress in our favorite industry. The prospect for a large yield of honey this year is good.

Marshall, Tex.

For the American Bee Journal.

The Dollar Queen Traffic.

O. O. POPPLETON.

I see that the columns of the JOURNAL are again being filled with articles on the "dollar queen" business, but have noticed that not a single one of the scores of such articles have been written by one of that class of bee-keepers who are the most interested in the discussion, viz: the buyer and user of such queens. As one of that number, I will try and add my mite.

The article from Prof. Cook's pen, in a late number of the BEE JOURNAL, I regard as the ablest one yet written on that side of the discussion, and also the most candid, with possibly two or three exceptions, especially the one from Mr. L. C. Root, but both in my opinion have allowed a theory to lead them into an error. All that part of the Professor's article in which he speaks of the great desirability of taking special pains in the breeding of our bees, meets with my hearty commendation; but I utterly dissent from his opinion, that "the dollar queen traffic stands directly in the way of the best achievements."

The truth is, that the theory which Prof. Cook's article so ably advocates is magnificent as a theory, but it is utterly impossible for our thousands of practical bee-keepers to carry it out. He essentially admits this fact when he says, in one place, that he "cannot find time with his numerous duties to do this as he thinks that it ought to be done," and in another, that "he would do this work if he had time to give to it, and had capital to warrant the undertaking." If the Professor, with his abilities and surroundings, cannot even attempt to carry out his own theory, how can he expect our average bee-keepers to do so? Americans are a practical people, and American bee-keepers are not one whit behind their neighbors in that respect, and practical theories are the only ones that will be approved in the long run, and if the

Professor with an assured income from another source, can find neither time nor capital to carry out this theory, certainly neither myself nor the hundreds of others who are dependent on their bees for the wherewithal to buy bread and butter for themselves and little ones, can be expected to do so. None except those who have large capital and a peculiar situation can possibly do this work. He says in his article that "to breed the ideal queen will require such a rigorous weeding out that only a small proportion of the queens reared will be suffered to live." May I ask if this very fact does not prevent our bee-keepers from even attempting to breed the ideal queen, however desirous all may be to do so, for such a course would destroy all idea of obtaining any revenue from our bees? If the obtaining a revenue is not our prime object in keeping bees, then I have thoroughly mistaken the aims and objects of our business.

I understand that the vital point which Prof. Cook makes is, the cheapness that untested queens can be procured for destroys any large demand for higher-priced, better queens, and, therefore, no one could sell enough queens at a high enough price to pay for rearing them as he suggests. Boil this entire discussion down, and that is really the only seemingly tenable point raised against the "dollar queen traffic," and if true, we would all of us be forced to admit the strength of it; but, honestly, I do not believe that point is true.

We can all of us remember how much was said in the bee papers a few years ago, about the extra vigor and value of daughters of imported mothers, and how this idea so industriously circulated, caused nearly every one when ordering queens to demand of the seller that they be the daughters of imported queens. I am not fully posted in the business, but am satisfied that within two or three years after the inauguration of the "dollar queen traffic," the demand for imported queens at a high price was at least doubled. Scores, yes hundreds of practical bee-keepers in our Northern latitude will buy early queens at a dollar each, and make them pay too, who neither would nor could buy them at two or three dollars each, and let me assure Prof. Cook that if either himself, L. C. Root or any other bee-keeper of equal reputation for honesty and ability, will raise queens as he thinks they ought to be raised, they would never have to send them to be tested before being purchased, and at good round figures too, and every one who sells dollar queens would be forced to use these particular queens, or retire from the business in disgrace. In other words, the "dollar queen traffic" itself, instead of being the greatest hindrance, would be the greatest incentive to the best achievements, for it would force the purchase of hundreds, where otherwise only scores of the high-priced queens would be bought.

Prof. Cook says he has purchased several untested queens, and won a blank each time. In his "Manual"

he says about the same thing, only he there specifies three as the number purchased, and I presume the indefinite number mentioned in his late article are the same ones spoken of in the Manual. I know of an instance where a bee-keeper lost more money, had more variation, and got many more poor queens on hand, by purchasing a very high-priced selected tested queen, than the Professor did by his purchase of three untested ones, and I would like to suggest to him, that the circumstance I mention is just as good proof on which to found an argument against high-priced tested queens, as his trial of only three untested ones is good proof of the right of his argument against that class of queens. There are so many exceptions to general rules affecting bees, that we have long ago learned that a few experiments proves very little, especially on so broad a subject as the qualities of different kinds of queens. No one can give an intelligent opinion of their value, unless on theoretical grounds, without having used a score or so of them, better yet, if their experience covers the use of several scores.

A common argument against dollar queens is to cite the example of Hammond, Bates, Booth, and others in the breeding of live stock. This is right if one only draws the correct conclusions. How much of the stock bred by these men has ever been purchased by the common farmer? How many of those \$2,000 animals, recently sold in Chicago, went to others than fine stock breeders? I venture to answer, not one. What would we think of the wisdom of a common dairyman owning a score or so of cows, investing from \$2,000 to \$5,000 in the purchase of a single animal to improve his herd, when he could purchase an animal practically as good for one-tenth the money. Let our Cooks, Jones, and Roots go to work and produce as superior a strain of bees as Bates and Booth did of cattle, and my word for it, every dollar queen-breeder, and nearly every large bee-keeper, will obtain one or more of the improved queens, without regard to price; but the wildest theorist would not expect ordinary bee-keepers to purchase them by the dozens each year, as some of us do of untested queens. Instead of being a hindrance, I think the selling of dollar queens bred from such stock would do far more toward the universal improvement of bees over our entire country, than anything else that can be done.

The common mistake of those who oppose the "dollar queen traffic" is, they think there is more value in a decided improvement of the bees owned by a few bee-keepers, than they do of a lesser rate of improvement of all the bees in the country. Take a pencil and figure up the relative values of a ten per cent. improvement of all the bees in the country, and a fifty per cent. improvement of the bees owned by a score or a hundred of our leading bee-keepers, and what is the result? Of course, the buying or selling of dollar queens prevents no one from improving his own

stock all his circumstances will allow him to do, but sends the direct descendants of our best stock broadcast among the mass of bee-keepers, who are forced to realize every dollar they can from their bees to supply immediate wants.

I have bought and used nearly 150 untested queens during the past few years, and had intended in this to have told how I use them, and some of my experience in buying them; but have already strung this out too long, so will defer that to some future time, if this discussion continues.

I do not want any one to think I intend this as a reply especially to Prof. Cook's article. I speak of that as I have, because it seems to go right to the gist of the matter, in the plainest and most direct manner of anything I have seen. Neither do I wish anyone to think I am opposed to breeding the very best queens we can get. I simply wish to oppose the strong effort being made to pull down a system of selling queens which has been of large benefit to me in my business, and I presume to others also.

Williamstown, Iowa.

For the American Bee Journal.

Texas Letter—Italian Bees Wanted.

MILES HADAWAY.

MR. PRINTER:—I hear you print a bee paper, and I want you to send me one to look at, to see if I like it. They tell me you always have much nice readings in it about that queer little critter that has a sweet tooth in its mouth and a sharp sticker in its tail, as Anne Strother's father told the old bee-hunter down at Powett's Tanyard last summer. I have been keeping bees here three years in the old fashioned way, that was thought very good away down east forty years ago and longer, where I was born and raised. But somehow I can't get along with them here, as old uncle Brewster used to do in Hockanum when I was a boy. Why he used to have lots of hives, and honey by the tubful every fall, when he took up his skeps with the brimstone rags. But here we often get nothing at all now. Whether the miller moths that are so plentiful here eat it all up, or the troublesome busy ants carry it all off, I don't know, and with all my watching could never find out. I sometimes think the bees get bewildered among the many strange flowers we have here, and cannot tell where to look for the sweet; and it were no wonder, such odd-shaped things they are. Maybe if we had other sorts of flowers, apple and cherry blossoms and such like, and hollyhocks and asters, such as they was used to of old, or had other bees better suited to the flowers here, we might do first rate in this climate where the busy fellows could work almost the year round without interruption. Well, cousin Upson was to see us when he come out prospectin', and he told us some wonderful stories about a new kind of hives they have to home, in which the bees build combs as straight

as a ruler on sticks, and the nice little whirling twirlabouts with which the honey can be shaken out of the combs right into dishes, all ready for the breakfast table. I half believed his yarns when he promised to send me one of these shakers next spring; but Mehitable, my wife, says there was a queer sort of a smirk on his face, and he gloared so silyly with his eyes while he was a telling and we was a listenin', that she's sure he was only trying to bamboozle us by his talk. I'm not so sure about that. Then he told us, too, about a new sort of imported bees, with striped backs and harmless queen stings that never hurts nobody, and can be handled, like well-riddled rye, without gloves, in the hottest weather. Wife doubted again, but I think there's a good deal of truth in the story; for when I was in Austin to buy a plow for neighbor Crume and a new collar for my horse, I hear some talk about such queer bees in the bar-room of the tavern. The chap that was a telling about them had a patent hive to sell, too. It wasn't one of them with the straight comb sticks that cousin Upson spoke about, but the man called it the Moth Worm Banisher. He said it was so fixed that when a moth touched it at night a scratcher strikes a lucifer match, and straightway the sudden flash and glare of light frightens all the moths within fifty feet, and away they go, harum-scarum, with a grand flutter and flourish, seeking to hide in outer darkness. That I think is a good invention, for these moths are troublesome and hard to catch, and the best way is to banish them right off. But about them new imported bees the man said he could not see any great good that came of them after all the fuss made about them, except that they made their honey from red clover tops instead of white, and hunted up all sorts of out-of-the-way flowers in by-places and roadsides, which the old kind of plain bees never thought worth looking at. Besides, he said, that while farmers could only make hay while the sun shines, these new comers would make honey, shine or no shine. This seemed to be saying something more for them than uncle Upson knew; and as everybody in the room appeared to believe what the hive seller said, because he had no interest in the matter, I think there is a good deal in it, and wish I had some. Mr. Printer, can't you put me in the way of getting a swarm? I would like to have them soon. Can't they be sent by telegraph, so as to come before Christmas? Swarming time begins here soon after New Year, when the drones have got over their holiday frolics. How much will they cost, though? If they are very dear I could not afford the expense till after the next cotton crop is made. They say a queen sells for five and six dollars! Just think of that! A little insect about an inch long selling at the price of a yearling colt! If the workers sell in proportion, won't they come high, as cousin Zeke reckons it out? Or if you put them down at even a picayune apiece, and there are thirty thousand in a

hive, only think what a decent hive would come to, by the rule of three! Then there's the freight too, if they come by telegraph, for the ticking clerk in the office always figures that out high; and so I am afraid that, if sent by that line, they might in the end cost more than they would come to. Aunt Dinah says she has read somewhere in the Penny Whistle Weekly, (which she gets every now and then at the grocer's around some articles she buys), that they now send these bees, or some kind of bees, by mail. That, I think, must be a good joke! Why, you might as well send a basketful of hornets by express. Phew, I'd like to stand at a safe distance away and see our sober-faced, steady old postmaster open the bag when they arrived! Wouldn't he make tracks in a hurry, and feel worse nor if he had a dozen big fleas in his ear? No, no, that's a little too tough a yarn to be swallowed by any but a greenhorn, though it is in print. But have those bees I will, sooner or later; and if they don't come quite as dear as cousin Zeke reckons it out, I'll get you, Mr. Printer, to have 'em sent by rail and steam even if they don't come till after Christmas. I'd have them sent by express, but that moves as slow in these parts as our old ox team used to do in old Middlesex, on Saturday nights, when we had hitched up to go sparking. Don't forget to tell the man who sells and sends them, to be sure to give them food enough for such a long jaunt, as the poor things musn't be let starve on the way. Tell him, too, to pack them well and hurry them forward—"with speed and care, right side up!"

Before I close, Mr. Printer, I want to say further, that when cousin Upson was here he told us there was great fuss just now away up in the old States, about some wonderful improvements in bee-keeping, which he said they call "scientific bee-culture." Now what is that? How is it made? How big is it? Is it patented? Does it go by machinery? Is it hard to learn how to work it? Or must you go to a sort of school or college to study how to manage it, till you get the hang of it gradually? Couldn't an old man learn to fix it up, without leaving home? How is one to get science into a bee gum, I'd like to know? That's a little above my huckleberry, as we used to say at Haddam school, when a hard question came up, and puzzled the head scholar of the class, though we had to work it out, for all that. Well, well, there was no lightening telegraph in them days, and nobody then dreamt of gold in California; so there may be something new in managing bees, though the wise man said, long years before I was born, There's nothing new under the sun. You'll print all about it, I suppose, and we'll see what it is when the paper comes. Send it on at once anyhow, or somehow.

Palo Pinto, Texas, Nov. 3, 1870.

N. B.—Wife says, be sure to ask whether it's certain that the new bees can make honey. Our old ones are

rather poor hands at it, and some years don't let us have any. Now, even if the striped fellows should produce six times as much, it wouldn't amount to anything, after all; for in Deacon Downer's school we were always told that 6 times 0=0; and we had to believe it, for not even the smartest boy in the class could prove that it wasn't so, and the Deacon ever insisted on proof.

SELECTIONS FROM OUR LETTER BOX

But Two or Three Warm Days.—Cold here yet. We had a frost here this morning; you could scrape it up in piles on the tin covers of my bee hives, still it was not hard enough to kill anything. We have had but 2 or 3 of what could be called warm days here this season. The mercury has not been above 80° only one day, while last year it was above 90° several days during May. Apple blossoms are now nearly gone here, but on the hills the trees are in full bloom. Last Thursday (8th) the bees got some honey from the bloom, but a rain in the afternoon stopped work, and it has been cold ever since. Glad to see others are prospering.

G. M. DOOLITTLE.

Borodino, N. Y., June 12, 1882.

Madeira Wine.—The recipe for Madeira wine from honey on page 339 is a correct translation of Dzierzon's in Berlepsch's great work. The only omission at the end is: "the bottles containing the wine should be buried in the sand—kept moist by being sprinkled now and then with brine." Berlepsch, quoting Dzierzon, says: "After a few years this wine is worthy to be served on the tables of princes." The only objectionable feature in the recipe is the old chemical superstition that a bright copper or brass kettle is not dangerous to use. It is really astonishing how tenacious a hold the fallacy has upon the people that, as long as they do not let the fluid get cool in a bright copper vessel, there is no danger.

L. K.

Savannah, Ga., June 2, 1882.

Buckeye Honey.—Bees in this locality have had a hard time this spring, and many kept in the old way have died in May. I wintered 19 colonies. All came through in good condition. I commenced feeding in March to stimulate them, in which I succeeded and on the 8th of April the strongest had 6 to 8 frames full of brood; then came a cold wave, and since that time I have been feeding at spells. Once, before I was aware of it, the bees had uncapped nearly all the young brood, and eaten the food from the young bees. Nearly all of the honey this spring has come from the buckeye. I am satisfied, if the spring

had been favorable, considering the strength of my bees, I would have obtained 50 pounds of honey per colony from buckeye. It commenced blooming the 2d of May, and is in bloom yet. The honey is white as that from linden, and I like the flavor better. There was some honey from crab apple bloom in it, which I think improved the flavor. WM. MALONE.
Oakley, Iowa, May 26, 1882.

Outlook has Never been Better.—The outlook for honey has never been better than this season, and the honey bee interest is largely on the increase. We bid you God speed in battling for a pure honey against the glucose combinations, and for a higher strain of bees. W. K. MARSHALL.
Marshall, Tex., June 12, 1882.

Good Following Bad.—I had 43 colonies in the fall of 1880, and lost 41 of them. The 2 colonies left were very weak. One of the two colonies swarmed twice, and I made a two-story hive of the weaker colony and extracted 100 lbs. from it; the other gave me 100 lbs. of box honey and some extracted. Last spring I began cleaning out the hives of dead bees, and setting them back on the summer stands for the bees to finish cleaning up the honey. As I could not buy any bees handy, I began to wish for some bees to come along, and, sure enough, the last day of May a fine swarm came along and went into one of my hives. That raised my spirits a little. So I kept on, thinking or wishing, or something else, and on the 4th of June 2 more came; in a few days another came, making 4 in all. The first that came gave me 5 boxes of honey, worth \$1.25 per box, and swarmed once, besides we extracted from the old colony in August right smart. The third colony that came swarmed twice; which makes 11 colonies to winter. I packed 8 of them in big boxes that I made for that purpose several years ago. Not one colony lived in them that winter, but I am going to try it again. I put 2 bricks on some of them, and corn-cobs on 2, besides chaff and straw. In the BEE JOURNAL for December, 1870, is a letter from Texas, that ought to be reprinted for young bee-keepers.

H. M. NOBLE.

Swedesburgh, Iowa.

[The letter is republished in this number.—ED.]

Doing Well on White Clover.—I am glad to be able to say my bees are doing well, although April and May were miserable months. I kept my bees breeding by constant feeding. I wintered 26 colonies without any loss, and have increased this spring so far to 47, all in fair condition for white clover, which is now blooming, and upon which my bees have been very busy the last few days, which is really the first harvest they have had this season, as the fruit bloom was all frosted. WM. B. MCCORMICK.
Uniontown, Pa., June 10, 1882.

Something New.—One day during the first week in May, I opened a hive containing a fertile worker, and in destroying her brood discovered some young worker bees coming out of the cells. I was surprised, but said nothing about it, for fear I might be laughed at. Yesterday I examined the colony again, and found 10 or 12 in a patch of brood from 5 to 6 inches square. Have any of our more experienced apiarists ever witnessed anything of the kind, or read of the like? I would have liked for a scientist to have seen them. This is a very discouraging season so far; starvation prevailed during swarming time; larvae was destroyed and brood uncapped, so that colonies are not as far advanced now as they were on the last day of April; and all this is not the result of a scarcity of bloom, but the cold confined the bees to the hives, and the nectar went to waste, if any was secreted. I am not able to enumerate the number of colonies lost, but there have been many.

ROBERT CORBETT.
Manhattan, Kans., June 9, 1882.

Scientific Pleasantry.—

Two prodigies this age has shown—
In Art sleek Oscar's flower has blown,
In Science Wiley reigns alone.

Let "Riley" quickly stand aside,
It was a Hoosier—well, he never lied—
A "scientific joke" is what he tried.
Evansville, Wis. H.

Splendid Prospects.—Bees have been doing splendidly the past few days, and the prospects are now very good.

WILLIAMSON & BRO.
Lexington, Ky., June 14, 1882.

Honey Locust.—Bees are just booming on the honey locust; indeed, I am beginning to think it equal to basswood, where it is abundant. There are, perhaps, 200 large honey locust trees in my vicinity. Most of them are loaded with racemes of blossoms. The bees have partly deserted fields of white clover, and their music can be heard all day long in the tree tops. This morning I had a swarm by 6 o'clock. Work in sections is going on finely.

C. H. DIBBERN.
Milan, Ill., June 14, 1882.

No Nectar.—For the last 3 or 4 years there has not in this part of Missouri, been enough nectar at any time to support bees—saying nothing of surplus—that is when bees could get it. This spring we had a fine apple and peach bloom; also crab apple, with many other blossoms in the timber; but not a day that the bees could get out after it. I have fed and tried to save them, but to no purpose; they are all about gone. We have not had any honey to eat for years, so I have concluded to raise sorghum for table use, since all other sweets are adulterated. I live in a newly settled country, where the people make "war" on white clover; no clover is sown—nothing for bees until Spanish-needles, and they have been worthless for the last three years; we may as well sow onions as buck wheat for bees. Scarcely a bee is living in this part of

the country, and I guess the harvest will get better before we hear the "hum of bees" again.

P. P. COLLIER.
Rush Hill, Mo., June 10, 1882.

Rain Needed.—Bees here never wintered better than last winter, and the opening of spring found them in splendid condition. April was cold and wet, and May cold and dry, with heavy frosts almost every night, which killed nearly all the fruit blossoms, leaving nothing but dandelions that bees could obtain anything from. Unless rain comes soon there will be but little white clover; it has just begun to blossom, but is drying up fast. There has been no swarming yet, and drones are flying from only a few of the strongest colonies. Taken all together, the season since the first of April is the worst that we have had for twelve years, and unless a change soon occurs for the better, the present will prove a most disastrous season for bees.

O. E. COOLEY.
Bluffton, Iowa, June 11, 1882.

Honey and Beeswax Market.

OFFICE OF AMERICAN BEE JOURNAL, }
Monday, 10 a. m., June 19, 1882. }

The following are the latest quotations for honey and beeswax received up to this hour:

Quotations of Cash Buyers.

CHICAGO.

HONEY—I am paying 7c. for dark and 9c. for light extracted.
BEESWAX—Choice lots are worth 25c. here; bright yellow, 24c.; dark to good, 17@22c.
AL. H. NEWMAN, 923 W. Madison St.

CINCINNATI.

HONEY—For Extracted we pay 7@9c. on arrival. Prices for comb honey nominal and demand slow.
BEESWAX—Brings 18@22c. The demand exceeds the offerings.
C. F. MUTH.

Quotations of Commission Merchants.

CHICAGO.

HONEY—The demand for comb honey is light, prices being made to meet views of purchaser.
BEESWAX—Scarce, and in demand at 23@25c.
R. A. BURNETT, 165 South Water St.

BOSTON.

HONEY—Trade quiet. We quote at 20@22c., according to quality.
BEESWAX—Prime quality, 25c.
CROCKER & BLAKE, 57 Chatham Street.

NEW YORK.

HONEY—White clover, fancy, 1 lb. bxs., 15@16c.; white clover, good to choice, 1 and 2 lb. bxs., 13@14c.; buckwheat, 2 lb. bxs., per lb., 11@12c. Extracted and strained, white, 9@10c.; dark 7@8c.
BEESWAX—The market continues rather quiet, but the supply is light and prices firmly sustained. Western, pure, 24@24½c.; Southern pure, 25@25½c.
D. W. QUINBY, 105 Park Place.

ST. LOUIS.

HONEY—In fair demand. Extracted selling at 8@10c.; comb scarce—nominal at 15@22c.
BEESWAX—Prime in demand at 22@23c.
R. C. GREER & CO., 117 N. Main Street.

SAN FRANCISCO.

HONEY—The first consignments of new arrived this week, including comb and extracted. Some new extracted in half barrels was placed at 8c., and some new comb, of very good quality but not extra white, sold at 16c.
We quote white comb, 14@16c.; dark to good, 8@12c. Extracted, choice to extra white, 8@14c.; dark and scented, 6½@7c. BEESWAX—23@25c.
STEARNS & SMITH, 423 Front Street.

CLEVELAND.

HONEY—As there is no honey in market, we have no quotations this week.
A. C. KENDEL, 115 Ontario Street.



ADVERTISING RATES.

20c. per agate line of space, each insertion.

A line of Agate type will contain about eight words; fourteen lines will occupy 1 inch of space. Transient Advertisements payable in advance.

Special Notices, 50 cents per line.

DISCOUNTS will be given on advertisements published WEEKLY as follows, if the whole is paid in advance:

For 4 weeks.....	10 per cent. discount.
" 8 ".....	20 " "
" 13 " (3 months)....	30 " "
" 26 " (6 months)....	40 " "
" 39 " (9 months)....	50 " "
" 52 " (1 year).....	60 " "

Discount, for 1 year, in the MONTHLY alone, 25 per cent., 6 months, 10 per cent., 3 months, 5 per cent.

Discount, for 1 year, in the SEMI-MONTHLY alone, 40 per cent., 6 months, 20 per cent., 3 months, 10 per cent.

Advertisements withdrawn before the expiration of the contract, will be charged the full rate for the time the advertisement is inserted.

THOMAS G. NEWMAN,

925 West Madison Street., Chicago, Ill.

Special Notices.

The BEE JOURNAL is mailed at the Chicago Postoffice every Tuesday, and any irregularity in its arrival is due to the postal employes, or some cause beyond our control.

We will send Cook's Manual in cloth, or an Apiary Register for 100 colonies, and Weekly BEE JOURNAL for one year, for \$3.00; or with King's Text-Book, in cloth, for \$2.75; or with Bees and Honey, in cloth, \$2.50.

Always forward us money either by postal order, registered letter, or by draft on Chicago or New York. Drafts on other cities, or local checks, are not taken by the banks in this city except at a discount of 25 cents, to pay expense of collecting them.

Premiums.—Those who get up clubs for the Weekly BEE JOURNAL for 1882, will be entitled to the following premiums. Their own subscription may count in the club:

For a Club of 2,—	a copy of "Bees and Honey."
" 3,—	an Emerson Binder for 1882.
" 4,—	Apiary Register for 50 Colonies, or Cook's (Bee) Manual, paper.
" 5,—	" " " cloth.
" 6,—	Weekly Bee Journal for 1 year, or Apiary Register for 200 Col's.

Or they may deduct 10 per cent in cash for their labor in getting up the club.

The Apiary Register.

All who intend to be systematic in their work in the apiary, should get a copy and commence to use it.

For 50 colonies (120 pages).....\$1 00
 " 100 colonies (220 pages)..... 1 50
 " 200 colonies (420 pages)..... 2 00

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones to procure at the start.

Preparation of Honey for the Market, including the production and care of both comb and extracted honey. A new pamphlet of 32 pages. At the last meeting of the North American Bee-Keepers' Society, we were appointed on a committee to prepare instructions on the Exhibition of Bees and Honey at Fairs; this is also added to the above. Price, 10 cents.

Bee Pasturage a Necessity.—We have just issued a new pamphlet giving our views on this important subject, with suggestions what to plant, and when and how. It is illustrated with 26 engravings, and will be sent postpaid to any address for 10 cents.

Binders cannot be sent to Canada by mail—the International Law will not permit anything but samples of merchandise weighing less than 8 oz.

Binders for 1882.—We have had a lot of Emerson binders made especially for the BEE JOURNAL for 1882. They are lettered in gold on the back, and make a nice and convenient way to preserve the JOURNAL as fast as received. They will be sent post paid by mail for 75 cents.

Neltnor's Fruit and Flower Grower is on our desk; it is edited and published by John C. Neltnor, Turner Junction, Ill., at 75 cents a year.

The Villa Bohemia, by Marie Le Baron, published by Kochendoerfer & Urie, 200 Broadway, N. Y. This is a very interesting little story of 250 pages. Price 50 cents.

Do not let your numbers of the BEE JOURNAL for 1881 be lost. The best way to preserve them is to procure a binder and put them in. They are very valuable for reference.

A Sample Copy of the Weekly BEE JOURNAL will be sent free to any person. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.

When changing a postoffice address, mention the old as well as the new address.

Examine the Date following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the BEE JOURNAL.

Ribbon Badges, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or \$8 per 100.

Advertisements intended for the BEE JOURNAL must reach this office by Saturday of the previous week.

Ashland, Pa., June 3, 1880.—A case of spavin that came under my observation was entirely cured by one bottle of Kendall's Spavin Cure, and the horse sold afterwards for \$200.
 25th Yours truly, C. H. BARNARD.

Advertisements.

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